

## ABSTRACT OF THE DISCLOSURE

Vertices of a polygon model M0 are sorted into those on which rays are projected (visible-surface vertices M01) and those on which rays are not projected (hidden-surface vertices M02) based on normal vectors V2 of the vertices of the polygon model M0 and a light source vector V1, and shadow models (shadow volumes) M1, M2, M3 are generated by moving the hidden-surface vertices in a direction of the light source vector V1. Shadow images can be easily created by applying stenciling to these shadow models.